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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,203

10/28/2003

Arthur Day

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EXAMINER

HONG, JOHN C

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,203

Applicant(s)

DAY ET AL.

Examiner

JOHN C. HONG

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/1/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “openings about a circumferential surface of the tube” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. It does not contain the claimed subject matter which is a fastener insertion device.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,3-8,13 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 9; Claim 13, line 2; and Claim 19, lines 1 and 2, “openings about a circumferential surface of the tube” is not clear. How are the openings made about a circumferential surface of the tube?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claim 1 is rejected, insofar as understood, under 35 U.S.C. 102(a) as being anticipated by Wills (U.S. Patent 3946926).

Wills discloses : a fastener insertion device to insert a fastener into a workpiece, comprising: a supply (10) of fasteners (F); a tube (66) defining an opening that is larger than the fastener; and an air flow generator (52) to create air flow through the tube and toward the workpiece, such that when the tube is aligned with a hole defined by the workpiece and the

fastener is placed in the tube, the air carries the fastener and inserts the fastener into the hole defined by the workpiece, wherein the tube defines openings (70) about a circumferential surface of the tube to prevent the fastener from inhibiting the air flow when the fastener is placed in the tube (Figs. 1 and 6; col.6, lines 38-44).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wills (U.S. Patent 3946926) in view of Applicant's admitted prior art (AAPA).

Wills teaches the limitation except the air flow generator generate laminar air flow and a seating carried by an end of the tube that faces the hole defined by the workpiece.

AAPA as found on page 17, lines 6 and 8 of the specification, discloses the air flow generator generate laminar air flow and a seating carried by an end of the tube that faces the hole defined by the workpiece.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the air flow generator generate laminar air flow and a seating carried by an end of the tube that faces the hole defined by the workpiece, as taught by AAPA on the device of Wills so as to insert the fastener.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wills (U.S. Patent 3946926) in view of Davern (U.S. Patent 4609134).

Wills teaches the limitations except a seating carried by an end of tube that faces the hole defined by the workpiece.

Davern teaches a seating (16) carried by an end of the tube (15) that faces the Hole defined by the workpiece (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the seating of Davern on the device of Wills so as to make continuation form of the tube.

9. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wills in view of Tamura et al. (U.S. Patent 4962917).

Wills teaches the limitation except a swivelable attachment with a moveable arm with hinge operably connected to the tube for permitting the tube to be alternately placed in a first position in alignment with an opening into which the fastener is to be inserted and in a second position out of alignment with the opening into which the fastener is to be inserted.

Tamura et al. teach a swivelable attachment (20) with a moveable arm (28), hinge and motor (32,34,36) operably connected to the tube for permitting the tube to be alternately placed in a first position in alignment with an opening into which the fastener is to be inserted and in a second position out of alignment with the opening into which the fastener is to be inserted (Fig.3 and 4; col. 3, lines 26-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the swivelable attachment of Tamura et al. on the device of Wills so as to swivel the tube in different positions.

10. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wills in view of Tamura et al. (U.S. Patent 4962917).

Wills teaches : an apparatus to insert a fastener into a workpiece comprising: a tube (66) defining a passageway that is larger than the fastener; an air flow generator (52) to create air flow through the tube and toward the workpiece, such that when the tube is aligned with a hole defined by the workpiece (Figs. 1 and 2 ; col. 6, lines 38-44).

Wills fails to teach a swivelable attachment with a moveable arm with hinge operably connected to the tube for permitting the tube to be alternately placed in a first position in alignment with an opening into which the fastener is to be inserted and in a second position out of alignment with the opening into which the fastener is to be inserted.

Tamura et al. al teach a swivelable attachment (20) with a moveable arm (28), hinge and motor (32,34,36) operably connected to the tube for permitting the tube to be alternately placed in a first position in alignment with an opening into which the fastener is to be inserted and in a second position out of alignment with the opening into which the fastener is to be inserted (Fig.3 and 4; col. 3, lines 26-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the swiveable attachment of Tamura et al. on the device of Wills so as to swivel the tube in different positions.

Regarding Claim(s) 13, Wills teaches the tube defines openings (70) about a circumferential surface of the tube to prevent the fastener from inhibiting the air flow when the fastener is placed in the tube (Figs. 1 and 6; col. 6, lines 38-44).

Regarding Claim(s) 14, Wills teaches a supply of fasteners (10).

11. Claims 15-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hametner et al. (U.S. Patent 4220275) in view of Wills (U.S. Patent 3946926).

Hametner et al. teach an apparatus to insert a fastener into a workpiece comprising: a gripping fingers (22) **with** tube (18) defining a passageway that is larger than the fastener (45); an air flow generator (col. 3, lines 42 and 43) to create air flow through the tube (18) and toward the workpiece, such that when the gripping finger (22) with tube (18) is aligned with a hole defined by the workpiece and the fastener is placed in the gripping finger (22) with tube (18), the air carries the fastener and inserts the fastener into the hole (Fig. 3) defined by the workpiece; a tooling platform configured to overlies the workpiece and defining an opening in alignment with the hole defined by the workpiece (Figs. 1 and 4); and a swivelable attachment (32) operably mounted to the tooling platform for permitting the gripping finger (22) with tube (18) to be alternately placed in alignment with the opening defined by the tooling platform and out of alignment with the opening defined by the tooling platform (Figs. 1, 3 and 4; col. 3, lines 13-35).

Hametner fails to teach the tube (without gripping fingers) defining a passageway that is larger than the fastener.

Wills teaches the tube (66) defining a passageway that is larger than the fastener (Fig. 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gripping fingers (22) of the Hametner by adding the tube (66) of Wills so as to hold the fastener in the receiving chamber.

Regarding Claim(s) 16-18, Hametner teaches the swivelable attachment further comprises a moveable arm that engages the tube, hinge and motor (34) (Fig. 3).

Regarding Claim(s) 19, Wills teaches the tube defines openings (70) about a circumferential surface of the tube to prevent the fastener from inhibiting the air flow when the fastener is placed in the tube (Fig. 6; col.6. lines 38-44).

Regarding Claim(s) 21, Hometner teaches a supply of fasteners (10).

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hometner/Wills as applied to claim 15 above, and further in view of MacDonald (U.S. Patent 4485754).

Hometner/Wills teach the limitation except an electromagnet disposed between the tooling platform and the workpiece , the electromagnet defining an opening aligned with the opening defined by the tooling platform and the hole defined by the workpiece.

MacDonald teaches an electromagnet disposed between the tooling platform and the workpiece , the electromagnet defining an opening aligned with the opening defined by the tooling platform and the hole defined by the workpiece (col.1, lines 60-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the electromagnet disposed between the tooling platform and the workpiece, as taught by MacDonald on the device of Hometner/Wills so as to align the openings between the tooling platform and the workpiece.

Response to Arguments

13. Applicant's arguments with respect to claims 1,3-21 have been considered but are moot in view of the new ground(s) of rejection. See the new Office action.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on HPH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jh
November 4, 2006



JOHN C. HONG
PRIMARY EXAMINER